

## ABSTRACT OF THE DISCLOSURE

A method and system for network security includes a first network device having a first set of key material with a base key and a key extension, and a second network device also having the first set of key material and a second set of key material with a second base key. The second  
5 network device is capable of communicating with the first network device using security determined by the first set of key material. The method and system for network security may further include a third network device having the second set of key material. The third network device is capable of communicating with the second network device using security determined by the second set of key material. For the present method and system, security determined by  
10 the first set of key material is stronger than security determined by the second set of key material.